High School Foodservice Survey

Developed by

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National Food Service Management Institute The University of Mississippi

Location

The National Food Service Management Institute (NFSMI) was established by Congress in 1989 at The University of Mississippi in Oxford. The Institute operates under a grant agreement with the United States Department of Agriculture Food and Consumer Service. NFSMI's Division of Applied Research is located at The University of Southern Mississippi in Hattiesburg.

Mission

The NFSMI is a catalyst for the continuous improvement of Child Nutrition Programs and services that promote healthy eating behaviors in children. As a national center, the NFSMI provides information, conducts applied research, and offers technical assistance, training, and education opportunities and materials using appropriate technology.

Vision

All activities and programs of the NFSMI are conducted in support of a vision to be a recognized resource and partner with local, state, and national child nutrition personnel and other stakeholders in safeguarding the health and well-being of the nation's children by giving children the knowledge to make healthy food choices and an opportunity to enjoy nutritious meals.

Programs and Services

- Quality publications appropriate for child nutrition personnel at an affordable price
- ♦ Applied research for development of effective child nutrition management practices
- ♦ Workshops and seminars for training child nutrition personnel
- ♦ National network of trainers
- ♦ Training materials developed by states for resale
- ♦ Education and training standards and materials
- Free training and information teleconferences through Nutrition Satellite Network
- ♦ Clearinghouse for information retrieval and dissemination
- ♦ Technical assistance through toll-free "help" lines

For more information, please call NFSMI at 1-800-321-3054.

NFSMI - Building the Future Through Child Nutrition

PREFACE

Child nutrition programs today are competing with fast foods, vending machines, and competitive food sales for school foodservice and nutrition program participation. To be successful, school foodservice and nutrition programs must maintain a sound customer base and financial stability. In today's market, the wants and needs of students must be met. The first step in meeting these wants and needs is to learn what they are. As a result, the National Foodservice Management Institute (NFSMI), Division of Applied Research developed a multi-year project to develop valid and reliable student satisfaction surveys for high and middle/junior high schools. The high school survey was the first to be developed.

Dr. Mary Kay Meyer, Ms. Deborah Carr and Dr. Martha Conklin worked on the development of this project. Ms. Jewel Adams prepared the manuscript. Thanks also go to the foodservice directors who gave their time and energy to make this project a reality.

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HIGH SCHOOL STUDENT SATISFACTION SURVEY

EXECUTIVE SUMMARY

Child nutrition programs today are much different from those of 1946 when the National School Lunch Program was first federally funded. Our primary customer has shifted from parents and administrators to students. Students today are more sophisticated and are exposed at an earlier age to a variety of types of food. They grew up in an environment of fast food restaurants and food courts. Choices have become the norm rather than the exception. Child Nutrition Programs (CNPs) today are competing with fast foods, vending machines, and competitive food sales for school lunch participation. To be successful, school foodservice and nutrition programs must maintain a sound customer base and financial stability. In today's market, the wants and needs of the students must be met. The first step in meeting these wants and needs is to learn what they are. This requires asking the students. However, surveys are time consuming to develop and must be validated to yield useful results. CNP directors and managers do not have time in their busy schedules to develop such an instrument. A literature search was conducted and no research based survey for student satisfaction was found.

As a result, the National Food Service Management Institute (NFSMI), Division of Applied Research initiated a multi-year project to develop student satisfaction surveys for high and middle/junior high schools. The first phase of the project was to develop a high school student satisfaction survey. The objectives of this study were:

- To determine whether the same survey could be used for high and middle/junior high school students.
- To determine if a relationship exists between student satisfaction and participation in the school foodservice and nutrition program.

The literature was reviewed to determine what information was available on surveying students for satisfaction with school foodservice. Little was found on the topic. One study was conducted by Sabatasso Foods Inc. (1995) in association with the American School Food Service Association. This study found the attribute most desired by the students was the taste of the food.

A large body of literature was found on the relationship between service quality, customer satisfaction and purchase behavior. One model proposed by Cronin & Taylor (1992) states that customer satisfaction has a significant impact on purchase behavior.

The NFSMI, Division of Applied Research study began with a focus group of seven (7) high school students. Students identified characteristics they felt described the "ideal school cafeteria." The information was used to draft the first survey instrument. This instrument was user tested and revised for clarity. The survey was then tested with 450 middle/junior high and 300 high school students. The districts chosen for the test geographically represented the U.S. Factor analysis showed there was a significant difference between the high and middle/junior high student groups. Therefore, a separate survey is needed for the middle/junior high market segment.

Results were analyzed, and the survey revised, shortened and retested. The revised survey was tested in four districts geographically representing the U.S. Eight high schools participated with a return of 1,826 surveys. Students identified dining ambiance, food quality and staff as the three most important factors in describing their satisfaction. There was a significant difference between the groups who never ate and ate frequently. The ate frequently group showed higher satisfaction, thus supporting the theory that satisfaction is related to participation. A statistically valid and reliable survey instrument for measuring high school student satisfaction was developed.

MAJOR FINDINGS

- Significant differences were found between high school and middle/junior high school students' measurement of satisfaction with the school foodservice.
- Factors identified as important to high school students were: staff, food quality, nutrition, diversity, time/cost and dining ambiance.
- A statistically significant difference was found (p<.01) between the high school groups who never ate and ate frequently (3-5 times per week) on the factors of dining ambiance, food quality and staff. This shows that the model proposed by Cronin & Taylor (1972), satisfaction influences purchase behavior, is true in school foodservice.
- For the groups "had a choice" and "had no choice" variety of food offered and flavor of the food were strong predictors of satisfaction.

RECOMMENDATIONS

- Further research is needed for the development of a valid and statistically reliable middle\junior high school and elementary student satisfaction surveys.
- Further research is needed to determine the impact on student satisfaction when improvements in the school are made to any attribute identified by the student as important.

HIGH SCHOOL STUDENT SATISFACTION SURVEY

INTRODUCTION

Child nutrition programs today are much different from those of 1946 when the National School Lunch Program was first federally funded. Our primary customer has shifted from parents and administrators to students. Students today are more sophisticated and are exposed at an earlier age to a variety of types of food. They grew up in an environment of fast food restaurants and food courts. Choices have become the norm rather than the exception. Child Nutrition Programs (CNPs) today are competing with fast foods, vending machines, and competitive food sales for program participation. To be successful, school foodservice and nutrition programs must maintain a sound customer base and financial stability. In today's market, the wants and needs of the students must be met. The first step is to learn what they are. This requires asking the students. However, surveys are time consuming to develop and must be validated to yield useful results. CNP directors and managers do not have time in their busy schedules to develop such an instrument. A literature search was conducted and no research based survey for student satisfaction was found.

As a result, the National Food Service Management Institute (NFSMI), Division of Applied Research began a multi-year project to develop student satisfaction surveys for high and middle/junior high schools. The first phase of the project was to develop a high school student satisfaction survey. The objectives of this study were:

- To determine whether the same survey could be used for high and middle/junior high school students.
- To determine if student satisfaction is related to participation in high school foodservices.

METHOD

The literature was reviewed to learn what information was available on surveying students for satisfaction with school foodservice. Little was found on the topic. One study was conducted by Sabatasso Foods Inc. (1995) in association with ASFSA. This study found the attribute most desired by the students was the taste of the food.

A large body of literature was found on the relationship between service quality, customer satisfaction and purchase behavior. One model proposed by Cronin & Taylor (1992) states that customer satisfaction has a significant impact on purchase behavior.

The NFSMI, Division of Applied Research study began with a focus group held on December 5, 1995, composed of seven (7) high school students (grades 9-12). Students were asked to discuss "What factors contributed to an 'ideal' school cafeteria." They were then asked to rank those factors identified in their discussion. Results showed fresh, clean food as the most important. Second was a clean cafeteria. Tied for third were: nice staff, no long lines and good variety.

The focus group also completed a Q-sort content validation procedure. Research scientists asked participants to sort 108 items describing a pleasant dining experience in a school foodservice. Each item was written on a 3 X 5 card. Students were asked to sort the cards into nine categories: variety, taste/aroma/quality of food, appearance of food, nutrition, friends/social interaction, atmosphere, time/convenience, promotions and cost. If a question was not consistently sorted (71% of the time) it was deleted from the pool. The item pool was reduced from 108 to 86.

User Test

The 86 items identified in the focus group as describing a pleasant dining experience in a school foodservice were used to develop two survey instruments (Appendix A). Each instrument used a different scale. Survey A used a scale of strongly disagree to strongly agree. Survey B divided questions and used two scales very unhappy to very happy and poor to excellent. Both instruments were user tested in one school in a local town. An English and a basic chemistry class participated. One of the research staff administered the survey and explained to the students the research project and asked them to honestly complete the survey using a computer scan sheet similar to ones used with standardized tests. Following the completion of the survey, students were asked if there were any questions they did not understand. Students identified "a-la-carte" and "garnish" as two words unfamiliar to them. One student asked for an example of a promotion.

Results were statistically analyzed using SPSSx. for validity and congruency. Survey B had greater reliability as shown in Table 1. The two scale format was selected for the pilot.

First Test

The survey was revised and modifications made for understanding (Appendix B). Letters were sent to all participating school districts to distribute to the teachers and principals to help them understand the process (Appendix B). A letter accompanied the survey explaining the survey process and was read to the students prior to the survey (Appendix B).

The survey was tested with 150 high school students in each of two districts: La Cross, Wisconsin, and Wilmington, Massachusetts and 150 junior high/middle school students in each of three districts: Anaheim, California; La Cross, Wisconsin, and Wilmington, Massachusetts.

The research staff questioned whether students should have the option of answering "I don't know." It was felt that students may not be able to truly answer all questions especially if they do not eat school meals often or at all. By giving them the option of "I don't know" the data would be more accurate and therefore have a higher reliability. (Naumann and Giel, 1995). The same survey was edited to include this option and tested with 150 high school and middle/junior high students in Jackson, Mississippi (Appendix B).

Following the survey, teachers asked students to identify words they did not understand, phrases that were unclear and if there were questions that should be asked that were not. This information was recorded and returned with the surveys (Appendix B). School foodservice directors participating in the study completed a data sheet identifying variables associated with the school foodservice such as participation rates, type of service systems, labor cost and meal prices (Appendix B).

The statistical program SPSSx was used for data analysis. Analysis of means revealed that students who perceived they had a choice whether to eat in the school foodservice (question 84) answered the survey differently from those who felt they did not have a choice. There was a difference of importance and statistical significance (p<.001) between the means. They did not exhibit the same characteristics as a "normal" customer. A "normal" customer being one that chooses to eat in the school foodservice. The main goal in the survey development process was to design a survey that could be used nationwide for all high schools. The research staff believed answers for students who felt they had no other choice would skew the data. Thus the reliability and validity of the final survey would be affected. For these reasons, the segment who felt they did not have a choice of whether they are were eliminated from further analysis.

Frequencies of use of "I don't know" were analyzed. Table 2 shows the frequencies of use of the responses "I don't know" to survey questions. It was felt that the use of this option was not misused by the students. They appeared to use this response when appropriate. It was decided by the research staff to keep this as a response option.

Factor analysis using SPSSx was used to decide the underlying constructs in the scale and to reduce the number of items used for analysis while maintaining the reliability of the instrument. Factor analysis of high school and middle/junior high school students showed differences in attributes desired by high school and middle/junior high school students. Also, questions within similar factors were different. The differences in these two groups are shown in Table 3. As a result, middle/junior high schools were eliminated from further survey development.

Discriminate analysis was used to identify variables by which those high school students who never ate and those who ate frequently could be distinguished. Table 4 shows the differences in these two groups. Two factors were statistically significant: atmosphere and extended services

(p < .05). In both instances, students who never ate in the school foodservice rated the atmosphere and presence of extra services lower than students who frequently ate.

Second Test

Because of the information gathered on the first test and elimination of questions through factor analysis, the survey was redesigned and a second test conducted. Questions were eliminated if they double loaded, failed to load or loaded at less than .51. The complete survey is show in Appendix C. Table 5 shows the factor reliability for the revised survey. Sites selected for the second test were: Humble, Texas; Anaheim, California; Marysville, Kansas; Claymont, Delaware, and Tuscaloosa, Alabama. Efforts were made to include schools serving a low percentage of free and reduced students to reduce the number of students responding "I have no other choice" when asked "What is your number one reason for eating school lunch?" A profile of the schools included in the study is shown in Table 6. Several schools asked to be part of the study and were included though the percentage of students served was high in the free and reduced price category. It is interesting that the school with the highest percentage of free and reduced price students served had the highest mean score on the majority of questions.

Comments were requested on a separate sheet rather than having it as a question on the survey itself. Each district was asked to keep these sheets and analyze the responses (Appendix C). Letters were again sent for teachers and students (Appendix C). A statistically significant sample was gathered in each participating school. A total of 1,826 students participated. School foodservice directors were again asked to complete a data sheet so further data analysis could be performed (Appendix C).

Students answering "I have no other choice" to question 46 "What is the number one reason you eat school lunch" were analyzed separately from those who felt they "had a choice" of whether eat in the school foodservice. The "had no choice" segment totaled 440 surveys.

Students answering more than six (6) times "I don't know" were also eliminated from the study. This segment totaled 319 surveys. Sixty eight (68) answered both "had no choice" (question 46) and more that six questions with "I don't know". Even though it was determined that it was appropriate to use "I don't know" as a question option, it was felt that if a student responded to six (6) or more questions with this response they were not taking the survey seriously. By including their responses to the survey, the results were skewed. The inclusion of these surveys shifted the school means.

Factor analysis using SPSSx was used to determine the constructs in the scale and reduce the number of items used for analysis. Subgroups included in this analysis were students who felt they "had a choice" and answered six (6) or less questions with "I don't know". These two groups

were used to ensure a valid and reliable model representing a population who freely chooses to eat school lunch. Table 7 shows the factors and questions. The question "How happy are you with the school foodservice overall?" was removed from the final factor development. This question was one of the weaker loading questions in this factor with a score of .645. It was felt by the researchers that the factor best represented food quality and should be renamed to reflect this. Final survey factors and reliability are shown in Table 8. A proposed final survey is found in Appendix D.

Multiple linear regression was used to determine the correlation between the dependent variable satisfaction (How happy are you with the school foodservice overall?) and independent variables (the attributes desired by the students) for students who felt they "had a choice" and "had no choice". Results for the group "had a choice" showed that high school student satisfaction was most highly related to:

- variety of food offered
- attractiveness of the serving line
- flavor of the food
- quality of food choices
- ability to meet cultural and ethnic preferences
- courteousness of the staff
- quality of ingredients
- staff smiling and greeting students

Table 9 shows the multiple regression results. Variety of food offered, attractiveness of the serving line and flavor of the food explained the most variance in the model and were the top three variables in predicting satisfaction. This is significant because flavor of the food was also the variable identified by Sabatasso Foods Inc. (1995) as the attribute most important to the students. Of the seven attributes, five are in the food quality factor. This shows students are concerned with food quality. These results also showed that students are concerned with the friendliness of the staff and are influenced by ethnic preferences.

Multiple regression results of the group who felt they "had no choice" showed satisfaction was most highly related to:

- variety of food offered
- flavor of the food
- quality of the choices offered
- staff listens to the students
- offering of special events and promotions
- adequacy of the number of serving lines
- availability of choices to meet religious needs

In both groups, variety of food and flavor of the food were strong predictors of satisfaction.

A Student's t test was conducted to determine if the two groups, those who never eat and eat frequently were significantly different for any of the factors. Table 10 shows the results of this analysis. Factors of dining ambiance, food quality and staff were statistically significant (p < .01).

RESULTS

- Significant differences were found between high school and middle/junior school students' measurement of satisfaction with the school foodservice.
- A statistically significant difference was found (p<.01) between the groups who never ate and ate frequently on the factors of dining ambiance, food quality and staff. This shows that the model proposed by Cronin & Taylor (1972), satisfaction influences purchase behavior, is true in school foodservice.
- Factors identified as important to students were: staff, food quality, nutrition, diversity, time/cost and dining ambiance.
- For the group "had a choice" and "had no choice" variety of food offered and flavor of the food were strong predictors of satisfaction.

CONCLUSIONS

A valid and reliable instrument for assessing high school student satisfaction with school food service was developed.

• Overall, the results indicate that the level of student participation is directly related to dining ambiance, food quality and foodservice staff.

RECOMMENDATIONS

- Further research is needed for the development of valid and statistically reliable middle\junior high school and elementary student satisfaction surveys.
- Further research is needed to determine the impact on student satisfaction when improvements in the school are made to any attribute identified by students as important.

Table 1

STUDENT SATISFACTION SURVEY RELIABILITIES USERS TEST

	Number of Questions	Survey A 1 Scale	Survey B 2 Scales
Variable		Alpha level	Alpha level
Satisfaction	6	0.73	0.79
Quality	13	0.86	0.73
Cost	2	0.18	0.72
Variety	5	0.45	0.54
Value	5	0.26	0.74
Atmosphere	9	0.84	0.74
Staff	9	0.74	0.95
Time	4	0.74	0.82
Promotions	4	0.65	0.77
Appearance	8	0.73	0.8

Survey A N = 20Survey B N = 19

Table 2

PERCENTAGE OF RESPONSES "I DON'T KNOW" FIRST TEST OF STUDENT SATISFACTION SURVEY

Question	I don't know (Percent)
1. How happy are you with the school cafeteria overall?	7.0
2. How happy are you with the variety of food offered?	9.2
3. How happy are you with what you get for what you pay?	11.9
4. How happy are you with the quality of the foods served?	8.6
5. How happy are you with the nutritional value of the foods offered?	13.8
6. How happy are you with the atmosphere of the cafeteria?	8.9
7. How happy are you with the promotions/special meals offered?	13.8
8. How happy are you with the appearance of the cafeteria?	5.9
9. The quality of the menu choices is	3.0
10. The quality of the hot entrees is	7.0
11. The quality of the desserts is	5.4
12. The quality of the salads is	13.0
13. The quality of the cooked vegetables is	11.9
14. The quality of the cold sandwiches (such as peanut butter or hoagies) is	16.5
15. The quality of the brands offered is	14.9
16. The quality of the ingredients used is	25.9
17. The appearance of the foods is	8.6
18. The aroma of the foods is	9.7
19. The flavor of the food is	5.1
20. The fresh fruits are high quality	6.8
21. My favorite foods are always the same quality	14.9
22. Many food choices are available	3.5
23. The choices of food available allow me to meet religious preferences	31.1
24. The choices of food allow me to meet special dietary needs such as low fat or diabetes	22.7

Question	I don't know (Percent)
25. The choices of food allow me to meet ethnic and cultural preferences	29.2
26. Popular menu items are offered weekly	7.3
27. There are choices of milk each day in the cafeteria	4.1
28. Single item foods are available for purchase separately from a meal (such as just buying ice cream)	5.4
29. Assorted fresh fruits are available daily	4.1
30. The cafeteria runs out of a food item	9.7
31. There are dessert choices on the menu each day	6.2
32. The school menu includes foods I like	3.8
33. Vegetarian meals are offered	15.1
34. School cafeteria prices are reasonable for the portions served	9.5
35. Eating in the cafeteria fits into my weekly budget	12.7
36. Nutritious foods are available daily	10.5
37. Low fat food items are offered daily	18.1
38. The serving size satisfies me	5.1
39. Nutritious information on food products is posted	13.5
40. Meals are designed for healthy eating	14.3
41. Information on calories contained in foods is available	16.2
42. Information on fat contained in foods in available	17.3
43. The atmosphere in the cafeteria is cheerful/upbeat	7.8
44. Cafeteria serving lines are clean	5.7
45. The noise level in the dining area is OK	4.1
46. Tables in the dining area are clean	3.5
47. Spills and trash in the dining area are cleaned quickly	4.1
48. Adequate supervision is present in the cafeteria	8.9
49. Decorations are bright and cheerful	6.5
50. I always have a place to sit	3.0

Question	I don't know (Percent)
51. The seating arrangement allows me to talk to my friends	2.4
52. The attitude of the cafeteria staff is	3.8
53. The appearance of the cafeteria staff is	5.1
54. Cafeteria staff are courteous	5.4
55. Cafeteria staff are clean and neat	5.4
56. Cafeteria staff listen to the students	4.3
57. Cafeteria staff smile and greet me when I am served	4.6
58. Cafeteria staff answer my question	7.3
59. Cafeteria staff are friendly	4.9
60. Cafeteria staff treat me with respect	4.9
61. The serving line moves quickly	2.7
62. The time available to eat once seated is adequate	5.1
63. The number of serving lines is adequate	5.7
64. Overall, time given for meals is adequate	6.8
65. Special events and promotions are offered frequently	12.2
66. Theme days are offered in the cafeteria	11.6
67. Cafeteria decorations for theme days/special events encourage me to eat	9.7
68. Menus are posted which allows me to make choices	6.5
69. My parents know what is served	10.8
70. Foods look appetizing	5.7
71. Hot entrees are appetizing	5.1
72. Vegetables are appetizing	7.3
74. Cold sandwiches (such as peanut butter or hoagies) are appetizing	10.8
75. Foods on the serving line are decorated	6.5
76. Meals are served attractively	5.1
77. When I go through the serving line, I see foods with a variety of colors	5.4

Table 3

MIDDLE/JUNIOR AND HIGH SCHOOL FACTORS FIRST TEST OF STUDENT SATISFACTION SURVEY

	Middle		High	
Question	Factor	Factor Loading	Factor	Factor Loading
1. How happy are you with the school cafeteria overall?	Overall Satisfaction	.68712	Overall Satisfaction	.55315
2. How happy are you with the variety of foods offered?	Overall Satisfaction	.66104	Overall Satisfaction & Cost	.65876 .52439
3. How happy are you with what you get for what you pay?	Overall Satisfaction	.55151	Overall Satisfaction	.52124
4. How happy are you with the quality of the foods served?	Overall Satisfaction	.69294	Overall Satisfaction	.53510
5. How happy are you with the nutritional value of the foods offered?	Overall Satisfaction	.62100	Overall Satisfaction	.49552
6. How happy are you with the atmosphere of the cafeteria?	Overall Satisfaction	.52752	Overall Satisfaction & Factor 10	.38996 .41598
7. How happy are you with the promotions/special meals offered?	Overall Satisfaction	.49770	Overall Satisfaction	.53885
8. How happy are you with the appearance of the cafeteria?	Overall Satisfaction	.61822	Overall Satisfaction & Factor 10	.42219 .59703
9. The quality of the menu choices is	Overall Satisfaction	.60037	Overall Satisfaction	.58924
10. The quality of the hot entrees is	Overall Satisfaction	.59298	Overall Satisfaction	.53107
11. The quality of the desserts is	Dessert	.61686	Factor 10	.48925
12. The quality of the salads is	Vegetable/ Salads	.56048	Factor 11	.69662
13. The quality of the cooked vegetables is	Vegetable/ Salads	.46327	Atmosphere	.41921
14. The quality of the cold sandwiches (such as peanut butter or hoagies) is	Vegetable/ Salads	.38242		
15. The quality of the brands offered is	Overall Satisfaction	.51399	Overall Satisfaction	.60220

	Middle		High	
Question	Factor	Factor Loading	Factor	Factor Loading
16. The quality of the ingredients used is	Overall Satisfaction & Vegetable/ Salads	.51135 .40958	Overall Satisfaction	.51314
17. The appearance of the food is	Overall Satisfaction	.62825	Overall Satisfaction	.53807
18. The aroma of the food is	Overall Satisfaction	.56220	Promotions	.43203
19. The flavor of the food is	Overall Satisfaction	.55376	Overall Satisfaction	.48883
20. The fresh fruits are high quality	Vegetable/ Salads	.40790	Promotions	.43480
21. My favorite foods are always the same quality	Overall Satisfaction	.47848	Atmosphere	.42243
22. Many food choices are available	Overall Satisfaction	.45236	Overall Satisfaction & Variety	.41025 .46504
23. The choices of food available allow me to meet religious preferences	Diversity	.69452	Diversity	.67174
24. The choices of food allow me to meet special dietary needs such as low fat or diabetes	Diversity	.58559	Diversity	.67185
25. The choices of food allow me to meet my ethnic and cultural preferences	Diversity	.66112	Diversity	.69777
26. Popular menu items are offered weekly			Diversity	.45331
27. There are choices of milk each day in the cafeteria	Dessert & Variety	.44082 .41967		
28. Single item foods are available for purchase separately from a meal (such as just buying ice cream)	Extended Services	.70011	Extended Services	.47813
29. Assorted fresh fruits are available daily	Extended Services	.57685	Extended Services	.45515
30. The cafeteria runs out of a food item	Extended Services	.50155	Factor 10	.59986
31. There are dessert choices on the menu each day	Dessert	.702011	Extended Services	.72981
32. The school menu includes food I like	Overall Satisfaction	.52625	Overall Satisfaction Extended Services	.47080 .47382

	Middle		High	
Question	Factor	Factor Loading	Factor	Factor Loading
33. Vegetarian meals are offered	Nutrition	.43074	Extended Services	.54320
34. School cafeteria prices are reasonable for the portions served	Cost	.56564	Cost	.67665
35. Eating in the cafeteria fits into my weekly budget	Cost	.51323		
36. Nutritious foods are available daily	Nutrition	.42084	Nutrition	.50571
37. Low fat food items are offered daily	Nutrition & Diversity	.47055 .45365	Nutrition	.56212
38. The serving size satisfies me				
39. Nutrition information on food products is posted	Nutrition	.70618	Nutrition	.66465
40. Meals are designed for healthy eating	Nutrition	.55395	Promotions &Nutrition	.48905 .54546
41. Information on calories contained in foods is available	Nutrition	.74503	Nutrition	.55598
42. Information on fat contained in foods in available	Nutrition	.76487	Nutrition	.59997
43. The atmosphere in the cafeteria is cheerful/upbeat	Atmosphere	.57084	Factor 12	.45413
44. Cafeteria serving lines are clean	Atmosphere	.62541	Atmosphere	.70335
45. The noise level in the dining area is OK	Atmosphere	.64361	Atmosphere	.77626
46. Tables in the dining area are clean	Atmosphere	.69109	Atmosphere	.64818
47. Spills and trash in the dining area are cleaned quickly	Atmosphere	.72235	Atmosphere	.53802
48. Adequate supervision is present in the cafeteria	Atmosphere	.65137	Atmosphere	.42377
49. Decorations are bright and cheerful	Atmosphere	.53933	Promotions	.50747
50. I always have a place to sit	Seating	.67035	Extended Services	.43116
51. The seating arrangement allows me to talk to my friends	Seating	.57620	Extended Services	.59982
52. The attitude of the cafeteria staff is	Staff	.68835	Staff	.70449
53. The appearance of the cafeteria staff is	Staff	.71018	Staff	.74620
55. Cafeteria staff are clean and neat	Staff	.67801	Staff	.67257
56. Cafeteria staff listen to the students	Staff	.74078	Staff	.77435
57. Cafeteria staff smile and greet me when I am served	Staff	.74682	Staff	.81536
58. Cafeteria staff answer my questions	Staff	.69999	Staff	.77686

	Middle		High	
Question	Factor	Factor Loading	Factor	Factor Loading
59. Cafeteria staff are friendly	Staff	.78292	Staff	.81085
60. Cafeteria staff treat me with respect	Staff	.75512	Staff	.83907
61. The serving line move quickly	Time	.37521		
62. The time available to eat once seated is adequate	Time	.76081	Time	.86742
63. The number of serving lines is adequate	Time	.52568	Time	.42879
64. Overall, time given for meals is adequate	Time	.68120	Time	.82922
65. Special events and promotions are offered frequently	Promotions	.53823	Promotions	.70788
66. Theme days are offered in the cafeteria	Promotions	.38927	Promotions	.70389
67. Cafeteria decorations for theme days/special events encourage me to eat	Promotions	.55379	Promotions	.64928
68. Menus are posted which allows me to make choices	Time	.41284	Promotions	.46654
69. My parents know what is served	Promotions	.46608	Promotions	.51430
70. Foods look appetizing	Overall Satisfaction	.50908	Overall Satisfaction & Promotions	.47926 .47926
71. Hot entrees are appetizing	Overall Satisfaction	.52718	Overall Satisfaction	.44112
72. Vegetables are appetizing	Vegetable/ Salads	.63104	Promotions	.52791
73. Salads are appetizing .	Vegetable/ Salads	.72008		
74. Cold sandwiches (such as peanut butter or hoagies are appetizing	Vegetable/ Salads	.52806	Promotions	.51396
75. Foods on the serving line are decorated	Promotions	.42878	Promotions	.77052
76. Meals are served attractively	Overall Satisfaction & Promotions	.46203 .40215	Promotions	.79877
77. When I go through the serving line, I see foods with a variety of colors	Overall Satisfaction	.41306	Promotions	.68822

Note: Blank cells did not factor at .45 or above % of variance middle/junior high = 65.5

% of variance high school = 65.7

Table 4

DISCRIMINATE ANALYSIS OF FACTORS FIRST TEST OF HIGH SCHOOL STUDENT SATISFACTION SURVEY

		Mean	Standard Deviation	F Value	2-Tail Prob.
Overall Satisfaction	n with School foodservice Never eat				
	Eat frequently	2.6643 3.3596	1.173 1.04	1.27	.098
Cafeteria Staff					
	Never eat Eat frequently	3.9232 3.6147	1.571 1.399	1.26	.110
Atmosphere					
	Never eat Eat frequently	2.6901 3.3078	1.666 1.4 37	1.34	.043*
Nutrition					
	Never eat Eat frequently	1.8965 2.8527	1.850 1.711	1.17	.161
Diversity					
	Never eat Eat frequently	2.307 3.2427	1.691 1.589	1.13	.403
Time					
	Never eat Eat frequently	2.2725 2.7799	1.594 1.587	1.01	.945
Promotions					
	Never eat Eat frequently	2.2820 2.6704	1.220 1.266	1.08	.627
Extended Services					
	Never eat Eat frequently	2.5067 3.8740	1.370 1.148	1.42	.014*
Cost					
226	Never eat Eat frequently	2.2050 3.0872	1.786 1.653	1.17	.287

n = 236

Never = does not eat food served by school foodservice.

Frequently = eats food served by school foodservice 3-5 times per week.

^{*} p<.05

Table 5

RELIABILITIES OF FACTORS REVISED HIGH SCHOOL STUDENT SATISFACTION SURVEY

Factor	N of Items	Alpha level
Overall Satisfaction	8	.8664
Staff	7	.9408
Atmosphere	4	.8562
Nutrition	3 ·	.9021
Diversity	3	.8130
Time	3	.7966
Promotions	6	.9033
Extended Services	4	.7393
Cost	2	.7653

Table 6

PROFILE OF SCHOOLS IN SECOND TEST HIGH SCHOOL STUDENT SATISFACTION SURVEY

State	School	Average Daily Attendance	% Served Free	% Served Reduced
Texas	1	939	2 %	17%
	2	2372	.5%	11%
Delaware	1	947	20%	5%
•	2	1190	24%	6%
Kansas	1	370	69 %	12%
Alabama	1	1252	23%	2%
	2	1432	35%	3%
California	1	2025	75%	10.5%

Table 7

FINAL SURVEY FACTORS HIGH SCHOOL STUDENT SATISFACTION SURVEY

Factor	Question
Staff	Foodservice staff listen to the students
	The foodservice staff treat me with respect
	The foodservice staff are courteous
	The foodservice staff smile and greet me
	The foodservice staff answer my questions
	The foodservice staff are friendly
	The appearance of the foodservice staff is
Food Quality	The variety of food offered is
	Foods on the serving line are attractive
	The quality of food choices is
	The quality of brands of food offered is
	The quality of the ingredients used is
	The flavor of the food is
Nutrition	Nutrition information on food products is posted
	Information on calories contained in food is available
	Information on fat contained in food is available
Diversity	The choices of food available allow me to meet religious needs
	The choices of food available allow me to meet ethnic and cultural preferences
Time/Cost	School foodservice prices are reasonable
	Time given for meal periods is adequate
	The time available to eat once seated is adequate
	The number of serving lines is adequate
Dining Ambiance	Tables in the dining area are clean
	Theme days/special events are offered
	Special events and promotions are offered
	The dining area temperature is comfortable
	The noise level in the dining area is OK

% of Variance = 62.6

n = 996

Table 8

RELIABILITIES OF FACTORS FINAL HIGH SCHOOL STUDENT SATISFACTION

Factor	N of Items	Alpha level
Staff	7	.8981
Food Quality	6	.8696
Nutrition	3	.8508
Diversity	2	.7586
Time/Cost	4	.7563
Dining Ambiance	5	.7263

Table 9

MULTIPLE REGRESSION WITH DEPENDENT VARIABLE OVERALL SATISFACTION HIGH SCHOOL STUDENT SATISFACTION SURVEY

Independent Variable	Beta value	Independent Variable	Beta value	
2. How happy are you with the variety of food offered	0.34532	2. How happy are you with the variety of food offered	.406202	
5. Foods on the serving line are attractively presented	0.151502	40. The flavor of the food is	.188808	
40. The flavor of the food is	0.116739	37. The quality of the food choices is	.152715	
37. The quality of the food choices is	0.086043	6. The staff listen to students questions	.119524	
10. The choices of food allow me to meet my ethnic and cultural preferences	0.072426	28. Special events and promotions are offered	.113681	
23. The foodservice staff are courteous	0.06703	36. The number of serving lines is adequate	115291	
39. The quality of the ingredients used is	.074319	8. The choices of food allow me to meet religious needs	.079211	
27. The school foodservice staff smile and greet me when I am served	.05635			

n = 685 R Square = .48467 F(7,678) = 91.1, p < .0001 n = 440 R Square = .48732 F (7,432) = 58.661, p < .0001

Table 10

STUDENT'S **t** TEST ON NEVER EAT AND EAT FREQUENTLY FOR FACTORS HIGH SCHOOL STUDENT SATISFACTION SURVEY

Factor Never Eat Eat Frequently	n of Cases	Mean	Standard Deviation	t Value
Food Quality				
Never eat Eat frequently	262 1164	3.1581 3.4200	1.508 1.427	-2.55**
Staff Never eat Eat frequently	254 1164	3.6049 3.9735	1.775 1.747	-3.00**
Nutrition Never eat Eat frequently	203 1038	2.4877 2.4770	1.745 1.737	0.08
Diversity Never eat Eat frequently	178 915	3.5562 3.6792	2.124 2.070	-0.7
Time/Cost Never eat Eat frequently	207 1155	2.9092 2.9615	1.658 1.599	-0.47
Dining Ambiance Never eat Eat frequently	262 1155	3.7313 4.0115	1.572 1.436	-2.65**

^{**} p < .01

Never eat= does not eat food served by school foodservice.

Eat frequently = eats food served by school foodservice 3-5 times per week.

REFERENCES

- Anderson, E. W., Fornell, C., & Lehmann, D. R. (1994). Customer satisfaction, market share, and profitability: Findings from Sweden. *Journal of Marketing*, 58, 53-66.
- Barsky, J. D. & Labagh, R. (1992). A strategy for customer satisfaction. The Cornell Hotel and Restaurant Administration Quarterly, October, 32-40.
- Bearden, W. O. & Teel, J. E. (1983). Selected determinants of consumer satisfaction and complaint reports. *Journal of Marketing Research*, 20, 21-28.
- Bojanic, D. C. & Rosen, L. D. (1994). Measuring service quality in restaurants: an application of the SERVQUAL instrument. *Hospitality Research Journal*, 18 (1), 3-14.
- Bolton, R. N. & Drew, J. H. (1991a). A longitudinal analysis of the impact of service changes on customer attitudes. *Journal of Marketing* 55, 1-9.
- Boulding, W., Kalra, A., Staelin, R., & Zeithmal, V. A. (1993). A dynamic process model of service quality: From expectations to behavioral intentions. *Journal of Marketing Research*, 30, 7-27.
- Brown, T. J., Churchill, G. A. Jr., & Peter, J. P. (1993). Improving the measurement of service quality. *Journal of Retailing*, 69, Spring, 127-139.
- Cadotte, E. R., Woodruff, R. B., & Jenkins, R. L. (1987). Expectations and norms in models of consumer satisfaction. *Journal of Marketing Research*, 24, 305-314.
- Callan, R., J. (1994). Development of a framework for the determination of attributes used for hotel selection --- indications from focus group and in-depth interviews. *Hospitality Research Journal*, 18, (2), 53-74.
- Cardozo, R. N. (1965). An experimental study of customer effort, expectation, and satisfaction. *Journal of Marketing Research*, 2, 244-249.
- Churchill, G. A. Jr. & Surprenant, C. (1982). An investigation into the determinants of customer satisfaction. *Journal of Marketing Research*, 19, 491-504.
- Cronin, J. J. Jr. & Taylor, S. A. (1992). Measuring service quality: A reexamination and extension. *Journal of Marketing*, 56, 55-68.

- Cronin, J. J. Jr. & Taylor, S. A. (1994). SERVPERF versus SERVQUAL: Reconciling performance-based and perceptions-minus-expectations measurement of service quality. *Journal of Marketing*, 58, 125-131.
- Czepiel, J. A. & Rosenberg, R. J. (1977). The study of consumer satisfaction: Addressing the "So What" question. In Hunt, H. K. (Ed.), Conceptualization and Measurement of Consumer Satisfaction and Dissatisfaction, (pp 92-119). Cambridge, MA: Marketing Science Instate.
- Dube, L., Renaghan, L. M., & Miller J. M. (1994). Measuring customer satisfaction for strategic management. *The Cornell Hotel and Restaurant Administration Quarterly*, February, 39-47.
- Halstead, D. (1989). Expectations and disconfirmation beliefs as predictors of consumer satisfaction, repurchase intention, and complaining behavior: An empirical study. *Journal of Consumer Satisfaction and Complaining Behavior*, 2, 17-21.
- Kirwin, P. (1992). Increasing sales and profits through guest satisfaction. *The Cornell Hotel and Restaurant Administration Quarterly*, 33, 38-39.
- Maddox, R. N. (1981). Two-factor theory and consumer satisfaction: Replication and extension. Journal of Consumer Research, 8, (June), 97-102.
- Mazis, M. B. Ahtola, O. T., & Klippel, R. E. (1975). A comparison of four multi-attribute models in the prediction of consumer attitudes. *Journal of Consumer Research*, 2 (June), 38-52.
- Naumann, E. & Giel, K. (1995). Customer Satisfaction Measurement. Thomson Executive Press, Cincinnati. Ohio.
- Oliver, R. L. (1980). A cognitive model of the antecedents and consequences of satisfaction decisions. *Journal of Marketing Research*, 17, 46-49.
- Oliver, R. L. & Westbrook, R. A. (1982). The factor structure of satisfaction and related post purchase measures. In Day, R. L. & Hunt, H. K. (Eds.), *New findings on consumer satisfaction and complaining*, Bloomington, IN: Indiana University Press.
- Olshavsky, R. W. & Miller, J. A. (1992). Consumer expectations, product performance, and perceived product quality. *Journal of Marketing Research*, 9, 19-21.
- Parasuraman, A., Zeithmal, V. A., & Berry, L. L. (1985). A conceptual model of service quality and its implications for future research. *Journal of Marketing*, 49, 41-50.

Parasuraman, A., Zeithmal, V. A., & Berry, L. L. (1988). SERVQUAL: A multiple-item scale for measuring consumer perceptions of service quality. *Journal of Retailing*, 64, 12-40.

Parasuraman, A., Berry, L. L., & Zeithmal, V. A. (1991). Reassessment of expectations as a comparison standard in measuring service quality: Implications for further research. *Journal of Marketing*, 58, 111-124.

Swan, J. E. & Combs, L. J. (1976). Product performance and consumer satisfaction: A new concept. *Journal of Marketing*, 40, (April), 25-33.

Sabatasso Foods, Inc. (June 1995). 1995 Nutritional advisory council national survey. American School Food Service Association.

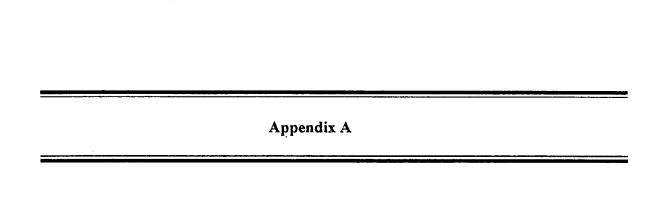
Teas, R. K. (1993). Consumer expectations and the measurement of perceived service quality. Journal of Professional Services Marketing, 8 (2), 33-53.

Teas, R. K. (1993). Expectations, performance evaluation, and consumers' perceptions of quality. *Journal of Marketing*, 57, 18-34.

Tse, D. K. & Wilton, P. C. (1988). Models of consumer satisfaction formation: An extension. *Journal of Marketing Research*, 25, 204-212.

Westbrook, R. A. (1980). A rating scale for measuring product/service satisfaction. *Journal of Marketing*, 44 (Fall), 68-72.

Westbrook, R. A., & Oliver, R. L. (1991). The dimensionality of consumption emotion patterns and consumer satisfaction. *Journal of Marketing Research*, 18, 84-91.



Are you happy with the school cafeteria?

How happy are you with the school cafeteria? Please fill in the answer sheet using the following scale: 0 = Strongly Disagree to 6 = Strongly Agree. Please answer all 84 questions.

Use a # 2 pencil.

Strongly

Disagree

Neither

4 (5) (6)

Strongly.

Agree nor Disagree

Example: Saturday is my favorite day of the

week. 10 10 20 30 40 50 60

Strongly Disagree Neither Agree nor Strongly Agree

Disagree

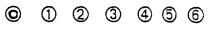
- 1. I am happy with the school cafeteria overall
- 2. I am unhappy with the variety of foods offered
- 3. I am happy with what I get for what I pay
- 4. I am happy with the quality of the foods served
- 5. I am happy with the nutritional value of the foods offered
- 6. I am happy with the atmosphere of the cafeteria
- 7. I am happy with the promotions/special meals offered
- 8. I am happy with the appearance of the cafeteria

Quality

- 9. The quality of the menu choices is good
- 10. The quality of the hot entrees is good
- 11. The quality of the desserts is good
- 12. The quality of the salads is good
- 13. The quality of the cooked vegetables is good
- 14. The quality of the cold sandwiches is good
- 15. The quality of the brands offered is good
- 16. The quality of the ingredients used is good
- 17. The appearance of the foods is good
- 18. The aroma of the foods is good
- 19. My favorite foods always tastes the same
- 20. The fresh fruits are high quality

Variety

- 21. An adequate number of food choices is available
- 22. The choices of foods available allow me to meet religious preferences
- 23. The choices of foods available allow me to meet special dietary needs such as low fat or diabetes
- 24. Popular menu items are offered weekly



Strougly Disagree Neither Agree nor Disagree Strongly Agree

- 25. Milk choices are not offered on a daily basis
- 26. Single item foods are available for purchase separately from a meal (a-la-carte)
- 27. Fresh fruits are available daily
- 28. Vegetarian meals are offered

Cost/Value

- 29. School cafeteria prices are reasonable for the portions served
- 30. Eating in the cafeteria fits into my weekly budget

Nutritional value of the foods

- 31. Nutritious foods are available daily
- 32. Low fat food items are offered daily
- 33. Serving sizes satisfy my appetite
- 34. Nutrition information on food products is posted
- 35. Meals are designed for healthy eating

Atmosphere

- 36. The atmosphere in the cafeteria is cheerful/upbeat
- 37. Cafeteria serving lines are clean
- 38. Noise level in the dining area is O.K.
- 39. Tables in the dining area are never clean
- 40. Spills and trash in the dining area are cleaned quickly
- 41. Adequate supervision is present in the cafeteria
- 42. Decorations are bright and cheerful
- 43. The number of seats in the cafeteria is adequate
- 44. The seats in the cafeteria are comfortable
- 45. The seating arrangement in the cafeteria allows me to talk to my friends

Cafeteria staff

- 46. The attitude of the cafeteria staff is good
- 47. Cafeteria staff are friendly
- 48. Cafeteria staff are courteous
- 49. Cafeteria staff are clean and neat
- 50. Cafeteria staff listen to the students
- 51. Cafeteria staff smile and greet me when I am served
- 52. Cafeteria staff answer my questions
- 53. The appearance of the cafeteria staff needs improvement
- 54. Cafeteria staff treat me with respect

Time/Convenience

- 55. The serving line moves slowly
- 56. The time available to eat once seated is adequate
- 57. The number of serving lines is adequate
- 58. Overall, time given for meals is adequate

0	1	2	3	4	⑤	6
Strongly Disagr ee			Neither Agree nor			Strongly Agree
quently			Disag	gree		

Promotions

- 59. Special meals and promotions are offered frequently
- 60. Menus are posted or published
- 61. My parents know what is served
- 62. Theme days are offered in the cafeteria
- 63. Cafeteria decorations for theme days/special meals encourage me to eat

Appearance

- 64. Foods look appetizing
- 65. Hot entrees are appetizing
- 66. Vegetables are appetizing
- 67. Salads are appetizing
- 68. Cold sandwiches are appetizing
- 69. Foods on the serving line are garnished
- 70. Meals are served attractively
- 71. When I go through the serving line, I see foods with a variety of colors

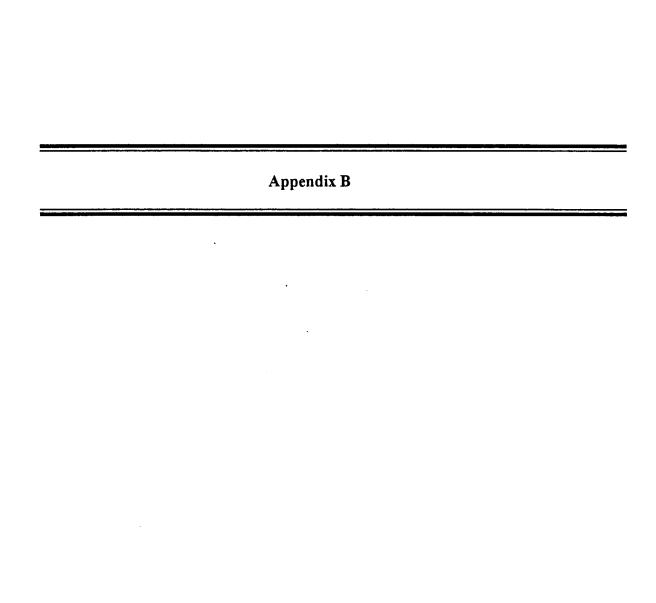
We want to know about you

- 72. What is your class in school?
 - 0 = 6th grade
 - 1=7th grade
 - 2 = 8th grade
 - 3 = Freshman
 - 4 = Sophomore
 - 5 = Junior
 - 6 = Senior
- 73. What is your gender?
 - 0 = Male
 - 1 = Female
- 74. What is your approximate age:
 - 0 = 10
 - 1 = 11
 - 2 = 12
 - 3 = 13
 - 4 = 14
 - 5 = 15
 - 6 = 16
 - 7 = 17
 - 8 = 18
 - 9 = 18 +

- 75. The number one reason I eat breakfast in the cafeteria is:
 - 0 = It is convenient
 - 1 = My friends do
 - 2 = It is economical
 - 3 = Eating in the cafeteria is a way of finding out what is happening
 - 4 = I have no other choice
 - 5 = My parents make me
 - 6 =The food is good
 - 7 = The popular kids eat in the cafeteria
 - 8 = We do not have a breakfast program
 - 9 = I do not eat breakfast in the school cafeteria
- 76. The number two reason I eat breakfast in the cafeteria is:
 - 0 = It is convenient
 - 1 = My friends do
 - 2 = It is economical
 - 3 = Eating in the cafeteria is a way of finding out what is happening
 - 4 = I have no other choice
 - 5 = My parent make me
 - 6 =The food is good
 - 7 = The popular kids eat in the cafeteria
 - 8 = We do not have a breakfast program
 - 9 = I do not eat breakfast in the school cafeteria
- 77. The number one reason I eat lunch in the cafeteria is:
 - 0 = It is convenient
 - 1 = My friends do
 - 2 = It is economical
 - 3 = Eating in the cafeteria is a way of finding out what is happening
 - 4 = I have no other choice
 - 5 = My parents make me
 - 6 = The food is good
 - 7 = The popular kids eat in the cafeteria
 - 8 = I do not eat lunch in the cafeteria
- 78. The number two reason I eat lunch in the cafeteria is:
 - 0 = It is convenient
 - 1 = My friends do
 - 2 = It is economical
 - 3 = Eating in the cafeteria is a way of finding out what is happening
 - 4 = I have no other choice
 - 5 = My parents make me
 - 6 = The food is good
 - 7 = The popular kids eat in the cafeteria
 - 8 = I do not eat lunch in the school cafeteria

79. How many times per week do you eat s	chool breakfast		0 1 2	. 3 4	. 5	
80. How many times a week do you eat sch			0 1 2	2 3 4	. 5	
81. How many times per week do you bring	g your lunch		0 1 2	2 3 4	. 5	
82. How many times per week do you go o	ff campus for lunch		0 1 2	2 3 4	. 5	
83. If you go off campus for lunch, you us	ually go to:					
0= Fast food burgers						
1 = Fast food chicken						
3 = Fast food pizza						
4 = Mexican	•					
5 = Local Mall/ Food court						
6 = Deli						
Other_	(fill in the blank us	sing this s	heet)			
84. If you could change one thing about you frequently in the cafeteria, what would it be					it more	e
					at more	e
					at more	e
					at more	e
					at more	e
					at more	e
					at more	e
					at more	e
					at more	e
					at more	e
					at more	e
					at more	e

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41

Are you happy with the school cafeteria?

How happy are you with the school cafeteria? Please fill in the answer sheet using the following scale: 0 = Very Unhappy to 6 = Very Happy. Be sure to answer all 84 questions. Use a # 2 pencil

O 1 2 3 4 5 6 Very Neither Very

Unhappy

Neither Very
Happy nor Happy
Unhappy

Example: How happy are you during summer vacation?

Very Neith Unhappy Happ

Neither Happy nor Unhappy Very Happy

- 1. How happy are you with the school cafeteria overall?
- 2. How happy are you with the variety of foods offered?
- 3. How happy are you with what you get for what you pay?
- 4. How happy are you with the quality of the foods served?
- 5. How happy are you with the nutritional value of the foods offered?
- 6. How happy are you with the atmosphere of the cafeteria?
- 7. How happy are you with the promotions/special meals offered?
- 8. How happy are you with the appearance of the cafeteria?

How would you rate your school cafeteria concerning the following?

Please rate these characteristics of your school cafeteria on a scale of 0 = Poor to 6 = Excellent

O ① ② ③ ④ ⑤ ⑥
 Poor Fair Excellent

Quality

- 9. The quality of the menu choices is
- 10. The quality of the hot entrees is
- 11. The quality of the desserts is
- 12. The quality of the salads is
- 13. The quality of the cooked vegetables is
- 14. The quality of the cold sandwiches is
- 15. The quality of the brands offered is
- 16. The quality of the ingredients used is
- 17. The appearance of the foods is
- 18. The aroma of the foods is
- 19. My favorite food always tastes the same
- 20. The fresh fruits are high quality

Example: The comfort of my tennis shoes is

O 1 2 3 4 5 6
Poor Fair Excellent

Poor

Fair

Excellent

Variety

- 21. An adequate number of food choices is available
- 22. The choices of foods available allow me to meet religious preferences
- 23. The choices of foods available allow me to meet special dietary needs such as low fat or diabetes
- 24. Popular menu items are offered weekly
- 25. Milk choices are offered on a daily basis
- 26. Single item foods are available for purchase separately from a meal (a-la-carte)
- 27. Fresh fruits are available daily
- 28. Vegetarian meals are offered

Cost/Value

- 29. School cafeteria prices are reasonable for the portions served
- 30. Eating in the cafeteria fits into my weekly budget

Nutritional value of the foods

- 31. Nutritious foods are available daily
- 32. Low fat food items are offered daily
- 33. Serving sizes satisfy my appetite
- 34. Nutrition information on food products is posted
- 35. Meals are designed for healthy eating

Atmosphere

- 36. The atmosphere in the cafeteria is cheerful/upbeat
- 37. Cafeteria serving lines are clean
- 38. Noise level in the dining area is O.K.
- 39. Tables in the dining area are clean
- 40. Spills and trash in the dining area are cleaned quickly
- 41. Adequate supervision is present in the cafeteria
- 42. Decorations are bright and cheerful
- 43. The number of seats in the cafeteria is adequate
- 44. The seats in the cafeteria are comfortable
- 45. The seating arrangement in the cafeteria allows me to talk to my friends

Cafeteria staff

- 46. The attitude of the cafeteria staff is good
- 47. Cafeteria staff are friendly
- 48. Cafeteria staff are courteous
- 49. Cafeteria staff are clean and neat
- 50. Cafeteria staff listen to the students
- 51. Cafeteria staff smile and greet me when I am served
- 52. Cafeteria staff answer my questions
- 53. The appearance of the cafeteria staff is good
- 54. Cafeteria staff treat me with respect

Time/Convenience

- 55. The serving line moves quickly
- 56. The time available to eat once seated is adequate
- 57. The number of serving lines is adequate
- 58. Overall, time given for meals is adequate

Promotions

- 59. Special meals and promotions are offered frequently
- 60. Menus are posted or published
- 61. My parents know what is served
- 62. Theme days are offered in the cafeteria
- 63. Cafeteria decorations for theme days/special meals encourage me to eat

Appearance

- 64. Foods look appetizing
- 65. Hot entrees are appetizing
- 66. Vegetables are appetizing
- 67. Salads are appetizing
- 68. Cold sandwiches are appetizing
- 69. Foods on the serving line are garnished
- 70. Meals are served attractively
- 71. When I go through the serving line, I see foods with a variety of colors

We want to know about you

- 72. What is your grade in school?
 - 0 = 6th grade
 - 1=7th grade
 - 2 = 8th grade
 - 3 = Freshman
 - 4 = Sophomore
 - 5 = Junior
 - 6 = Senior
- 73. What is your gender?
 - 0 = Male
 - 1 = Female

0 = 101 = 112 = 123 = 134 = 145 = 156 = 167 = 178 = 189 = 18 +75. The number one reason I eat breakfast in the cafeteria is: 0 = It is convenient 1 = My friends do 2 = It is economical3 = Eating in the cafeteria is a way of finding out what is happening 4 = I have no other choice 5 = My parents make me 6 =The food is good 7 = The popular kids eat in the cafeteria 8 = We do not have a breakfast program 9 = I do not eat breakfast in the school cafeteria 76. The number two reason I eat breakfast in the cafeteria is: 0 = It is convenient 1 = My friends do 2 = It is economical 3 = Eating in the cafeteria is a way of finding out what is happening 4 = I have no other choice 5 = My parents make me 6 =The food is good 7 = The popular kids eat in the cafeteria 8 = We do not have a breakfast program 9 = I do not eat breakfast in the school cafeteria 77. The number one reason I eat lunch in the cafeteria is: 0 = It is convenient 1 = My friends do 2 = It is economical 3 = Eating in the cafeteria is a way of finding out what is happening 4 = I have no other choice 5 = My parents make me 6 =The food is good 7 = The popular kids eat in the cafeteria 8 = I do not eat lunch in the school cafeteria

74. What is your approximate age:

78.	The number two reason I eat lunch in the cafeteria is: 0 = It is convenient 1 = My friends do 2 = It is economical 3 = Eating in the cafeteria is a way of finding out what is happening 4 = I have no other choice 5 = My parents make me 6 = The food is good 7 = The popular kids eat in the cafeteria 8 = I do not eat lunch in the school cafeteria							
79.	How many times per week do you eat school breakfast	0 1	2	3	4	5		
		0 1	2	3	4	5		
		0 1	2	3	4	5		
82.	How many times per week do you go off campus for lunch	0 1	2	3	4	5		
83.	If you go off campus for lunch, you usually go to: 0= Fast food burgers 1 = Fast food chicken 3 = Fast food pizza 4 = Mexican 5 = Local mall/ food court 6 = Deli							
	Other (fill in the blank using this sheet)							
84 fre	. If you could change one thing about your school cafeteria that would a quently in the cafeteria, what would it be?(fill in the blank using this s	mak hee	te y	/OU	. ea	at r	no 	re

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Are you happy with the school cafeteria?

How happy are you with the school cafeteria? Please fill in the answer sheet using the following scale: 0 = Very Unhappy to 6 = Very Happy. Be sure to answer all 90 questions. Use a # 2 pencil

Verv

Unhappy

Verv Unhappy

Neither Happy nor

Unhappy

Very

Happy

Example: How happy are you during summer vacation?

0 1 2 3 4 5

Neither Happy nor Very Нарру

Unhappy

- 1. How happy are you with the school cafeteria overall?
- 2. How happy are you with the variety of foods offered?
- 3. How happy are you with what you get for what you pay?
- 4. How happy are you with the quality of the foods served?
- 5. How happy are you with the nutritional value of the foods offered?
- 6. How happy are you with the atmosphere of the cafeteria?
- 7. How happy are you with the promotions/special meals offered?
- 8. How happy are you with the appearance of the cafeteria?

How would you rate your school cafeteria concerning the following?

Please rate these characteristics of your school cafeteria on a scale of 0 = Poor to 6 = Excellent

Poor

Fair

Excellent

Example: The comfort of my tennis shoes is

(1) (2) (3) (4) (5)

Poor Fair Excellent

Quality

- The quality of the menu choices is
- 10. The quality of the hot entrees is
- 11. The quality of the desserts is
- 12. The quality of the salads is
- 13. The quality of the cooked vegetables is
- 14. The quality of the cold sandwiches (such as peanut butter or hoagies) is
- 15. The quality of the brands offered is
- 16. The quality of the ingredients used is
- 17. The appearance of the foods is
- 18. The aroma of the foods is

Poor Fair Excellent

- 19. The flavor of the food is
- 20. The fresh fruits are high quality
- 21. My favorite foods are always the same quality

Variety

- 22. Many food choices are available
- 23. The choices of foods available allow me to meet religious preferences
- 24. The choices of foods allow me to meet special dietary needs such as low fat or diabetes
- 25. The choices of foods allow me to meet my ethnic and cultural preferences
- 26. Popular menu items are offered weekly
- 27. There are choices of milk each day in the cafeteria
- 28. Single item foods are available for purchase separately from a meal (such as just buying ice cream or fresh fruit)
- 29. Assorted fresh fruits are available daily
- 30. The cafeteria runs out of a food item
- 31. There are dessert choices on the menu each day
- 32. The school menu includes foods I like
- 33. Vegetarian meals are offered

Cost/Value

- 34. School cafeteria prices are reasonable for the portions served
- 35. Eating in the cafeteria fits into my weekly budget

Nutrition

- 36. Nutritious foods are available daily
- 37. Low fat food items are offered daily
- 38. The serving size satisfies me
- 39. Nutrition information on food products is posted
- 40. Meals are designed for healthy eating
- 41. Information on calories contained in foods is available
- 42. Information on fat contained in foods is available

Atmosphere

- 43. The atmosphere in the cafeteria is cheerful/upbeat
- 44. Cafeteria serving lines are clean
- 45. The noise level in the dining area is OK
- 46. Tables in the dining area are clean
- 47. Spills and trash in the dining area are cleaned quickly
- 48. Adequate supervision is present in the cafeteria
- 49. Decorations are bright and cheerful
- 50. I always have a place to sit
- 51. The seating arrangement allows me to talk to my friends

- 52. The attitude of the cafeteria staff is
- 53. The appearance of the cafeteria staff is
- 54. Cafeteria staff are courteous
- 55. Cafeteria staff are clean and neat
- 56. Cafeteria staff listen to the students
- 57. Cafeteria staff smile and greet me when I am served
- 58. Cafeteria staff answer my questions
- 59. Cafeteria staff are friendly
- 60. Cafeteria staff treat me with respect

Time/Convenience

Cafeteria staff

- 61. The serving line moves quickly
- 62. The time available to eat once seated is adequate
- 63. The number of serving lines is adequate
- 64. Overall, time given for meals is adequate

Special Events/ Promotions

- 65. Special events and promotions are offered frequently
- 66. Theme days are offered in the cafeteria
- 67. Cafeteria decorations for theme days/special events encourage me to eat
- 68. Menus are posted which allows me to make choices
- 69. My parents know what is served

Appearance

- 70. Foods look appetizing
- 71. Hot entrees are appetizing
- 72. Vegetables are appetizing
- 73. Salads are appetizing
- 74. Cold sandwiches (such as peanut butter or hoagies) are appetizing
- 75. Foods on the serving line are decorated
- 76. Meals are served attractively
- 77. When I go through the serving line, I see foods with a variety of colors

We want to know about you

78. What is your grade in school?

- 0 = 6th grade
- 1 = 7th grade
- 2 = 8th grade
- 3 = 9th grade
- 4 = 10th grade
- 5 = 11th grade
- 6 = 12th grade

Turn page→

79. What is your gender? 0 = Male1 = Female80. What is your approximate age: 0 = 101 = 112 = 123 = 134 = 145 = 156 = 167 = 178 = 189 = 18 +81. The number one reason I eat breakfast in the cafeteria is: 0 =It is convenient 1 = My friends do 2 = It is economical3 = Eating in the cafeteria is a way of finding out what is happening 4 = I have no other choice 5 = My parents make me 6 =The food is good 7 = The popular kids eat in the cafeteria 8 = We do not have a breakfast program 9 = I do not eat breakfast in the school cafeteria 82. The number two reason I eat breakfast in the cafeteria is: 0 =It is convenient 1 = Mv friends do 2 = It is economical 3 = Eating in the cafeteria is a way of finding out what is happening 4 = I have no other choice 5 = My parents make me 6 = The food is good 7 = The popular kids eat in the cafeteria 8 = We do not have a breakfast program 9 = I do not eat breakfast in the school cafeteria 83. The number one reason I eat lunch in the cafeteria is: 0 =It is convenient 1 = My friends do 2 =It is economical 3 = Eating in the cafeteria is a way of finding out what is happening 4 = I have no other choice 5 = My parents make me 6 =The food is good 7 = The popular kids eat in the cafeteria 8 = I do not eat lunch in the cafeteria

Turn page→

84.	The number two reason I eat lunch in the cafeteria is: 0 = It is convenient					
	1 = My friends do					
	2 = It is economical	·				
		anina				
	3 = Eating in the cafeteria is a way of finding out what is happ 4 = I have no other choice	cimia				
	5 = My parents make me					
	6 = The food is good					
	7 = The popular kids eat in the cafeteria					
	8 = I do not eat lunch in the school cafeteria					
85.	How many times per week do you eat school breakfast	0 1	2 3	4	5	
	How many times a week do you eat school lunch	0 1	2 3	4	5	
	How many times per week do you bring your lunch	0 1	2 3	4	5	
	How many times per week do you go off campus for lunch	0 1	2 3	4	5	
Ify	ou answered 0 to question 88 skip to question 90					
89.	If you go off campus for lunch, you usually go to:					
	0 = Fast food burgers					
	1 = Fast food chicken					
	3 = Fast food pizza					
	4 = Mexican					
	5 = Local mall/ food court					
	6 = Deli					
	Other (fill in the blank using this sho	eet of pape	er)			
00	If you could change one thing about your school cafeteria that v	vould mak	2 1701	1 4	at m	250
90.	quently in the cafeteria, what would it be?(fill in the blank using	thic chast	of	a Co	25 III	OI C
Ire	quently in the cateteria, what would it be (in in the blank using	this sirect	OI F	aμ		
						
						<u> </u>

Thank you for your assistance!



National Food Service Management Institute

Division of Applied Research
The University of Southern Mississippi
Box 10077 • Hattiesburg, MS 39406-0077
601-266-5773 • FAX: 601-266-4682

April 17, 1996

Dear Principals and Teachers,

The National Food Service Management Institute, Division of Applied Research is involved in a study to develop and test a Student Foodservice Survey for high school. The survey will determine high school students perceptions regarding the quality of food and services in their local school foodservice program. Our goal is to develop a customer driven survey process that will support local school districts nationwide in the enhancement of their school foodservice programs.

We are very pleased to announce that your school district has been selected to participate in a test of the survey. This test is a part of the research and development process that will help to increase the validity of the survey instrument. Please allow students to complete the survey during homeroom or a more appropriate academic class. This process will take approximately 15-20 minutes to complete. You will be provided a letter to read students explaining the survey. We ask that all students in selected classes participate in the survey. It is important that students are not overtly identified based on their meal classification or participation in the school foodservice program.

Thank you for your support of this endeavor. We could not complete this study without dedicated educators, such as yourself, who realize the importance of the school foodservice program and the role the program plays in the cognitive development of our youth.

Sincerely,

Mary Kay Meyer, PhD, RD

Research Scientist

Deborah Carr

Research Associate

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National Food Service Management Institute

Division of Applied Research
The University of Southern Mississippi
Box 10077 • Hattiesburg, MS 39406-0077
601-266-5773 • FAX: 601-266-4682

May 8, 1996

Dear Students,

You have been chosen to participate in a survey development project. The project is to design a survey questionnaire that will be used nationwide by school foodservice directors to study how students like the school cafeteria food, service and atmosphere.

Please complete this survey whether you eat or do not eat in the school cafeteria. It is important that you answer the questions based on your opinions.

Your participation with this project is voluntary and is greatly appreciated. Your responses to the survey questionnaire will be helpful to your foodservice director to improve the program and better meet your foodservice needs following the federally funded Child Nutrition Program guidelines .

Sincerely,

Mary Kay Meyer Ph.D., RD

Research Scientist

Deborah H. Carr, MS, RD

Research Associate

Are you happy with the school cafeteria?

How happy are you with the school cafeteria? Please fill in the answer sheet using the following scale: 0 = Very Unhappy to 6 = Very Happy. Be sure to answer all 90 questions. Use a # 2 pencil

(O)

2 3

Verv Unhappy

Neither Happy nor Unhappy

Very I Don't Happy Know

Example: How happy are you during summer vacation?

Very Unhappy

(a) (1) (2) (3) (4) (5) Neither Happy nor

Unhappy

Very

Happy

(7)I Don't know

- 1. How happy are you with the school cafeteria overall?
- 2. How happy are you with the variety of foods offered?
- 3. How happy are you with what you get for what you pay?
- 4. How happy are you with the quality of the foods served?
- 5. How happy are you with the nutritional value of the foods offered?
- 6. How happy are you with the atmosphere of the cafeteria?
- 7. How happy are you with the promotions/special meals offered?
- 8. How happy are you with the appearance of the cafeteria?

How would you rate your school cafeteria concerning the following?

Please rate these characteristics of your school cafeteria on a scale of 0 = Poor to 6 = Excellent

 \odot Poor

(3)

Fair

Excellent

I Don't Know

Example: The comfort of my tennis shoes is 1 2 3 4 5

Poor Fair Excellent I Don't Know

Ouality

- The quality of the menu choices is
- 10. The quality of the hot entrees is
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Turn page→

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Cost/Value

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- 43. The atmosphere in the cafeteria is cheerful/upbeat
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Fair

Excellent

I Don't Know

Cafeteria staff

- 52. The attitude of the cafeteria staff is
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We want to know about you

78. What is your grade in school?

0 = 6th grade

1 = 7th grade

2 = 8th grade

3 = 9th grade

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5 = 11th grade 6 = 12th grade

0 = Male1 = Female80. What is your approximate age: 0 = 101 = 112 = 123 = 134 = 145 = 156 = 167 = 178 = 189 = 18 +81. The number one reason I eat breakfast in the cafeteria is: 0 = It is convenient1 = My friends do 2 = It is economical 3 = Eating in the cafeteria is a way of finding out what is happening 4 = I have no other choice 5 = My parents make me 6 =The food is good 7 = The popular kids eat in the cafeteria 8 = We do not have a breakfast program 9 = I do not eat breakfast in the school cafeteria 82. The number two reason I eat breakfast in the cafeteria is: 0 = It is convenient 1 = My friends do 2 =It is economical 3 = Eating in the cafeteria is a way of finding out what is happening 4 = I have no other choice 5 = My parents make me 6 = The food is good 7 = The popular kids eat in the cafeteria 8 = We do not have a breakfast program 9 = I do not eat breakfast in the school cafeteria 83. The number one reason I eat lunch in the cafeteria is: 0 = It is convenient 1 = My friends do 2 = It is economical 3 = Eating in the cafeteria is a way of finding out what is happening 4 = I have no other choice 5 = My parents make me 6 =The food is good 7 = The popular kids eat in the cafeteria

8 = I do not eat lunch in the cafeteria

Turn page→

79. What is your gender?

84.	The number two reason I eat lunch in the cafeteria is: 0 = It is convenient 1 = My friends do 2 = It is economical						
	3 = Eating in the cafeteria is a way of finding out what is happening 4 = I have no other choice 5 = My parents make me 6 = The food is good	3					
	 7 = The popular kids eat in the cafeteria 8 = I do not eat lunch in the school cafeteria 						
86. 87.	How many times per week do you eat school breakfast How many times a week do you eat school lunch How many times per week do you bring your lunch How many times per week do you go off campus for lunch	0 1 0 1 0 1 0 1	2 2	3	4 4	5 5	
If y	ou answered 0 to question 88 skip to question 90						
89.	If you go off campus for lunch, you usually go to: 0 = Fast food burgers 1 = Fast food chicken 3 = Fast food pizza 4 = Mexican 5 = Local mall/ food court 6 = Deli Other	pap	er)				
	If you could change one thing about your school cafeteria that would uently in the cafeteria, what would it be?(fill in the blank using this s		•				ore.
	,					 	
							· · · · · · · · · · · · · · · · · · ·

Thank you for your assistance!

Survey Distribution Check Sheet for Teachers

- Read the enclosed letter to the students
- Pass out surveys, pencils and computer answer sheets
- Tell the students the pencils are theirs to keep for participating in the survey
- Students do not need to complete the name section on the answer sheet
- Collect completed surveys and answer sheets
- Read discussion questions and record answers
- Return surveys and answer sheets to director as discussed

Questions for Post Survey Discussion

Were there any questions you did not understand?

Were there any words you did not know the meaning of?

Are there any questions about your school cafeteria we should have asked that we did not?

How long did the class take to complete the survey?

School Profile for Student Satisfaction Survey

Please fill in the following information as it relates to your school

Demographic information

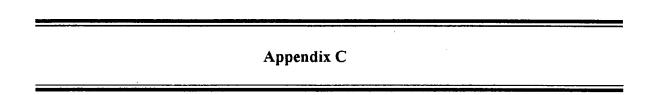
School name	School ad	dress			
			City	State	Zip
School phone	School fax	CNP	Director		
USDA Region	Average daily	attendance			
Average daily number of	students participating in school	l: Breakfast	Lun	ch	
Percentage of students se	rved in the following categorie	es: Free	Reduced	Paid	
What percent of the school	l population is represented by	each of the foll	owing cultural g	roups:	
% White no % Black not % Hispanic % Asian/Pac % American % Other	Hispanic				
	C.H				
_	full price Student i				
Lunch charge: Student	full price Student	reduced	_		
Average daily total food s	ales \$				
School site total labor hou	ırs per week Numb	er of staff: Full	time Pa	rt time	
Meal Service Information	n				
Is your campus: (Please	circle) Open or Closed				
Are students informed about	out the menu before entering	the serving area	? (Please circle)	Yes or N	10
Number of serving lines_	Number of cashiers_	Cafeter	ia seating capaci	ty	
How long is your average	breakfast period?H	ow long is your	average lunch p	eriod?	
How many students are s	cheduled for each meal period	: Breakfast?	Lunch	?	

Does your school allow competitive food sales during meat service? (Please circle) I es of No
Which of the following service styles do you use? (Please circle all used)
Food is served by the staff Food is portioned by the staff and chosen by the student Food is portioned by the student
Does your district allow a-la-carte sales? (Please circle) Yes or No If you do offer a-la-carte, which items are offered: (Please circle all items)
Milk and ice cream Fruit and fruit juices Entrees Salads Theme bars Non component items
Do you have cash transactions on the line? (Please circle) Yes or No
Production System Information
How many daily choices do you offer for each component: (Please circle) Meat/meat alternate 1 2 3 4 5 more than 5 Fruits / vegetables 1 2 3 4 5 more than 5 Breads/grains 1 2 3 4 5 more than 5
The menu is planned according to: (Please circle)
Nutrient Standard Menu Planning System Food Based Menu Planning System Assisted Nutrient Standard Menu Planning System Current Meal Pattern Other
Do you use nationally branded concepts? (Please circle) Yes or No If yes, what?
Do you use self branded concepts? (Please circle) Yes or No If yes, what?
What type of food preparation system do you use at this school: (Please circle)
Conventional on site (food is prepared and served at the school) Satellite (food is prepared at another location and shipped for service at the school)

School Foodservice Satisfaction Comments

would encoura	hange one thing about your school foodservice and nutrition program that ge you to eat more frequently, what would it be?
(im in the dia	nk using this sheet of paper)
Please check on foodservice pro	e of the following that best fits how often you eat food provided by the school gram.
	Never
	1 to 3 times per week
	4 to 5 times per week

Thank you for your assistance!





HIGH SCHOOL SATISFACTION SURVEY

Mational Foodservice Management institute

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Fill in this number as instructed by your teacher.

How happy are you with the school foodservice and nutrition program?

nutrition program? Please fill in the answer sheet using the following scale: 1 = Very Unhappy to 7 = Very Happy and 8 = I Don't Know. Be sure to answer all questions. Use a # 2 pencil.	Led Unhappy		northe Chi	14300 p.		Ledy	190p	1 Don't Know
1. How happy are you with the school foodservice overall?	Œ	D	3	3	3	<u>.</u>	\Box	(30)
2. How happy are you with the variety of food offered?	9	0	3	Œ	(3)	T	\mathcal{C}	CS C
3. How happy are you with the promotions/special events offered?	Θ	\odot	3	3	3	T	Θ	(35)
4. How happy are you with how the dining area looks?	Œ	\Box	3	Œ	3	E	σ	(38)

What do you think about your school foodservice?

program on a scale of 1 = Strongly Disagree to 7 = Strongly Agree and 8 = I Don't Know.	:		Or Ser	∙ 4 .		8/	, On
Please rate these characteristics of your school foodservice program on a scale of $1 = Strongly$ Disagree to $7 = Strongly$ Agree and $8 = I$ Don't Know.	Ser Co		35	960 re		ions/1	1 Don
5. Foods on the serving line are attractively presented.	9	<u>O</u>	3	Œ	3	Œ	Œ
6. Foodservice staff listens to the students.	Œ.	\mathcal{O}	3	Œ	(CD)	Œ	\mathcal{O}
7. Serving lines are messy.	00	\mathbf{O}	3	(3)	(3)	Œ	O
8. The choices of food available allow me to meet religious needs.	0	_ CD	<u>(3</u>)	Œ		(2)	\mathcal{O}_{i}
9. Information on fat contained in food is available.	CD	<u>C</u>	3	(3)	_ <u>_</u>	©	$\sigma_{_{_{_{_{_{_{_{_{_{_{_{_{_{_{_{_{_{_{$
10. The choices of food allow me to meet my ethnic and cultural preferences.	0	C	3	Œ	(G)	Œ	C
11. Single item foods (such as an extra vegetable or salad) can be purchased	**						
separately from a meal.	00	\Box	3	Œ	(S)	©	0
12. The foodservice staff treat me with respect.	, O	\Box	3	(3)	\odot	Œ	\mathbf{C}
13. Information on calories contained in food is available.	0	\mathbf{C}	3	Œ	્ઉ	Œ	O
14. The seating arrangement allows me talk to my friends.	O	, <u>C</u>	3	Œ	<u>(S</u>)	Œ	$\mathcal{O}_{\mathbb{R}^n}$
15. Dessert choices are not offered daily.	÷Φ	\mathcal{O}	3	Œ	3	Œ	00,
16. Vegetarian meals are offered.	0	\bigcirc	(3)	Œ	(3)	Œ	O
17. School foodservice prices are reasonable for the amount of food I get.	0	\mathbf{c}	3	Œ	3	Œ	0
18. Tables in the dining area are clean.	0	0	3	Œ	3	T	Œ
19. Nutrition information on food products is posted.	Œ	_ CD	3	\boldsymbol{x}	3	Œ	0
20. Meal prices fit into my weekly budget.	0	\bigcirc	3	Œ	(3)	Œ	\circ
21. The choices of food allow me to meet special dietary needs such as low							* .* .
fat or diabetes.	Œ	\bigcirc	3	Œ	3	T .	\odot
22. Theme days/special events are offered.	00	CD	3	Œ	_ ©	©	\mathcal{O}
23. The foodservice staff are courteous.	Φ,	0	(3)	((G)	©	Œ
24. All the food items look the same color.	Φ,	0	3	Œ	્ઉ	Œ	0
25. Spills and trash in the dining area are cleaned quickly.	0	(2)	<u> </u>	(3)	(3)	Œ	(C)
26. Overall, time given for meals is adequate.	0	CO	3	Œ	3	Œ	0
27. The foodservice staff smile and greet me when I am served.	⊙ ,	(C)	3	Œ		Œ	Ø.
28. Special events and promotions are offered.	0	_ CD	3	Œ	(S)	1	Œ
29. Foodservice staff answer my questions.	Œ	CD	<u> </u>		(Z)	<u>.</u>	Œ
30. Food is served neatly on the plate.	00	\mathcal{C}	3	Œ	(C)	6	O
31. The foodservice staff are friendly.	00	\mathbf{C}	(3)	Œ	. G	3	C D , ,
32. Decorations for theme days/special events encourage me to eat.	Œ	\Box	3	Œ	(C)	Œ	0
33. The dining area temperature is comfortable.	00	(CD	3	Œ	(3)	Œ	0
34. The noise level in the dining area is ok.	Θ	CC	3	Œ	(S)	Œ	0
35. The time available to eat once seated is adequate.	0	\mathbf{C}	3	(3)	(S)	Œ	O
36. The number of serving lines is adequate.	0	\mathbf{C}	(3)	Œ	(3)	Œ	$\mathcal{O}_{\mathbb{Q}_{2}}$

Please rate these characteristics of your school foodservice on a scale of 1 = Poor to 7 = Excellent and 8 = I Don't Know.
37. The quality of the food choices is? 38. The quality of the brands of food offered is? 39. The quality of the ingredients used is? 40. The flavor of the food is? 41. The appearance of the foodservice staff is? 37. The quality of the food choices is? 40. CD
We Want to Know About You
42. What is your grade in school? O 9th grade 10th grade 12th grade
43. What is your gender? Male Female
44. What is your approximate age? 13 years 14 years 15 years 15 years 16 years
45. The number one reason I eat school breakfast is? It is economical
46. The number one reason I eat school lunch is? It is economical
47. How many times per week do you eat school breakfast? 48. How many times a week do you eat school lunch? 49. How many times per week do you bring your lunch? 50. How many times per week do you go off campus for lunch? 50. To CD
If you answered 0 to question 50 skip question 51 and complete the yellow comment sheet.
51. If you go off campus for lunch, you most often go to: (Choose one) Fast food burgers Mexican Local mall/food court Fast food pizza Deli Other

How would you rate your school foodservice concerning the following?

School Foodservice Satisfaction Comments

	d change one thing about your school foodservice and nutrition program that
	urage you to eat more frequently, what would it be?
(fill in the l	plank using this sheet of paper)
	one of the following that best fits how often you eat food provided by the school
foodservice j	orogram.
	Never
	1 to 3 times per week
	4 to 5 times per week

Thank you for your assistance!



National Food Service Management Institute

Division of Applied Research
The University of Southern Mississippi
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October 10, 1996

Dear Principals and Teachers,

The National Food Service Management Institute, Division of Applied Research is involved in a study to develop and test a Student Foodservice Survey for high school. The survey will determine high school students perceptions regarding the quality of food and services in their local school foodservice program. Our goal is to develop a customer driven survey process that will support local school districts nationwide in the enhancement of their school foodservice programs.

We are very pleased to announce that your school district has been selected to participate in a test of the survey. This test is a part of the research and development process that will help to increase the validity of the survey instrument. Please allow students to complete the survey during homeroom or a more appropriate academic class. This process will take approximately 15-20 minutes to complete. You will be provided a letter to read students explaining the survey. We ask that all students in selected classes participate in the survey. It is important that students are not overtly identified based on their meal classification or participation in the school foodservice program.

Thank you for your support of this endeavor. We could not complete this study without dedicated educators, such as yourself, who realize the importance of the school foodservice program and the role the program plays in the cognitive development of our youth.

Sincerely,

Mary Kay Meyer, PhD, RD

Research Scientist

Deborah Carr

Research Associate



National Food Service Management Institute

Division of Applied Research
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October 10, 1996

Dear Students,

You have been chosen to participate in a survey development project. The project is to design a survey questionnaire that will be used nationwide by school foodservice directors to study how students like the school cafeteria food, service and atmosphere.

Please complete this survey whether you eat or do not eat food served by the school foodservice. It is important that you answer the questions based on your opinions. In the top right corner there is a box for your school code number. Your school code number is Please answer all fifty-one questions on the computer scan sheet using a #2 pencil. Also, complete the separate yellow comment sheet. This question is designed for you to be able to give specific meaningful information to the foodservice director.

Your participation with this project is voluntary and is greatly appreciated. Your response to the survey questionnaire will be helpful to your foodservice director to improve the program and better meet your foodservice needs following the federally funded Child Nutrition Program guidelines. The pencils are yours to keep as our *thank you* for participating in the survey.

Sincerely

Mary Kay Meyer, PhD, RD

Research Scientist

Deborah Carr, MS, RD Research Associate

School Profile for Student Satisfaction Survey

Please fill in the following information as it relates to your school

(1

School name	School distric	t enrollment	**************************************						
School phoneS	chool fax	School enrollment							
Number of students participating in	your school's: Breakfa	stL	ınch						
Percentage of your students receiving	ng: free meals	reduced price i	neals						
Number of adult meals served in yo	ur school per day (facu	lty, guests, etc.)							
Price of Breakfast: student Price of Lunch: student	reducedreduced	adultadult	·						
Number of serving lines Number of cashiers Cafeteria seating capacity									
Labor hours per week	Number of staff:	Full time	Part time						
The total length of time allotted for	: Breakfast	Lunch	1						
How are students scheduled for Bre	eakfast?								
How are the students scheduled for	Lunch?								
Please circle the answer or answer	rs that best apply to y	our school							
Does your school profile have two	or more ethnic groups o	or cultures represented	? Yes or No						
If yes, please list the ethnic groups	or cultures								
The service style that we use is: tr	raditional line or self s	ervice or combination	ı						
If self service is used, to what degr	ee of self service?								
Is a-la-carte available? Yes or l	No								
If a-la -carte is available, to what e	extent?	·							
Menu choices are provided for all	components. Yes or	No							
The menu is planned according to:	Food Based Menu F	andard Menu Planning	; System						

Thank you for your assistance!

Appendix D



High School Foodservice Survey

N I	9	\odot	2	3	3 D	ග	Œ	3	3	OE)
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B	Θ	Œ	Œ	30	(3)	3	(E)	D	B	©
R	a	Œ	Œ	30	Œ	Œ	Œ	Œ	æ	œ

<u>Fill in</u> this number as instructed by <u>vour teacher</u>.

How happy are you with the school foodservice and nutrition program?

_	Please completely fill in the circles for your answers. Use a #2 pencil.	Cer Cinhappy	No. 11/2 No. 11/2 (No. 1/4) No. 1/4	Legy Happy	I Doni Anou
-	1. How happy are you with the school foodservice overall?	Œ	© © ©	© 16 °	D S
	What do you think about you	r school	foodserv	rice?	•
	Please rate your school foodservice program on a scale of I = Strongly Disagree to 7 = Strongly Agree and 8 = I Don't Know.	Mely Disable	nor Distance	Stronely Act	Don't Know
	 Foods on the serving line are attractively presented. Foodservice staff listen to the students. The choices of food available allow me to meet religious needs. Information on fat contained in food is available. The choices of food allow me to meet my ethnic and cultural preference. The foodservice staff treat me with respect. Information on calories contained in food is available. School foodservice prices are reasonable for the amount of food I get. Tables in the dining area are clean. Nutrition information on food products is posted. Theme days/special events are offered. The foodservice staff are courteous. Time given for meal periods is adequate. The foodservice staff smile and greet me when I am served. Special events and promotions are offered. The number of serving lines is adequate. The foodservice staff are friendly. The dining area temperature is comfortable. The noise level in the dining area is OK. The time available to eat once seated is adequate. Foodservice staff answer my questions. 	8888	000000000000000000000000000000000000000	9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9
	How would you rate your school foods	ervice c	oncernin	g the foll	owing?
	Please rate your school foodservice program on a scale of 1 = Poor to 7 = Excellent and 8 = I Don't Know.	Poor	£ dij,	Excellen	1 Don't Know
	 23. The quality of the food choices is 24. The quality of the brands of food offered is 25. The quality of the ingredients used is 26. The flavor of the food is 27. The appearance of the foodservice staff is 28. The variety of food offered is 	000000	0 0 0 0 0 0 0 0 0 0 0 0		9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9
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SCANTRON FORM NO. F-10238-USM SCANTRON CORPORATION 1996 PC2 1497-258-5 4 3 2 1



29.	0	is your grade in sc 9th grade 10th grade	0	? 11th gr 12th gr											1 1
30.		is your gender? Male	0	Female	:										
31.	0 0 0	is your approxima 13 years 14 years 15 years 16 years	0 0	e? 17 year 18 year 19 year	rs	over Ç									_
32.	0000	number one reason It is economical The food is good It is convenient My teachers encound My friends do			0 0 0 0	My parents make me The popular kids do I have no other choice We do not have a bre I do not eat school br	akfast pı	ogram	1				·		=
33.	0 0 0 0	number one reason It is economical The food is good It is convenient My teachers enco My friends do			0 0 0	n is: My parents make me The popular kids do I have no other choic I do not eat school lu									=
35. 36.	How How	many times per we many times per we many times per we many times per we	eek d eek d	lo you e: lo you b	at sch ring y	ool lunch? our lunch?	999	8 8 8 8	0000	9 9 9 9	9 9 9 9	9999			-
If y	ou an	swered 0 to question	on 37	7 skip qı	uestio	n 38 and complete th	e comm	ent sh	eet.						
38.	0 0	ou go off campus fo Fast food burgers Fast food chicken Fast food pizza		ch, you	0 0 0	often go to: (Choose Mexican Local mall/food cour Deli Other									-

National Food Service Management Institute

The University of Mississippi P.O. Drawer 188 University, MS 38677-0188 Telephone 1-800-321-3054 Order Number R-28-97

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School Foodservice Satisfaction Comments

What one thing do you like best about your school foodservice and nutrition program that you would never want changed?
If you could change one thing about your school foodservice and nutrition program what would it be?
Please check one of the following that best fits how often you eat food provided by the school foodservice program.
Never1-2 times per week3-5 times per week

This project was funded at least in part with Federal funds provided to the National Food Service Management Institute at the University of Mississippi from the U.S. Department of Agriculture, Food and Consumer Service under Grant number F33385. The contents of this publication do not necessarily reflect the view or policies of the U.S. Department of Agriculture, nor does mention of trade names, commercial products or organizations imply endorsement by the U.S. government.

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